(FILE 'HOME' ENTERED AT 17:05:57 ON 23 NOV 1998)

INDEX 'ADISALERTS, ADISINSIGHT, AGRICOLA, AIDSLINE, ANABSTR, AQUASCI, BIOBUSINESS, BIOSIS, BIOTECHABS, BIOTECHDS, CABA, CANCERLIT, CAPLUS, CEABA, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, EMBAL, ...' ENTERED AT 17:06:30 ON 23 NOV 1998

E CHU H/IN SEA E3-E12

```
0* FILE ADISALERTS
   FILE ADISINSIGHT
0*
    FILE AGRICOLA
0*
    FILE AIDSLINE
0*
0*
    FILE ANABSTR
0*
    FILE AQUASCI
0*
    FILE BIOBUSINESS
0*
    FILE BIOSIS
     FILE BIOTECHABS
5
5
     FILE BIOTECHDS
0*
    FILE CANCERLIT
1
     FILE CAPLUS
0*
     FILE CEABA
     FILE CEN
0*
     FILE CIN
0*
     FILE CONFSCI
0*
     FILE DDFB
7
0*
     FILE DDFU
     FILE DGENE
42
7
     FILE DRUGB
     FILE DRUGLAUNCH
0*
     FILE DRUGMONOG2
0*
     FILE DRUGNL
0*
0*
    FILE DRUGU
    FILE EMBAL
0*
    FILE EMBASE
0*
1
     FILE FSTA
    FILE GENBANK
0*
0*
    FILE HEALSAFE
    FILE KOSMET
0*
0*
    FILE LIFESCI
0*
    FILE MEDLINE
0*
    FILE NIOSHTIC
0*
    FILE NTIS
0*
     FILE OCEAN
0*
     FILE PHAR
0*
     FILE PHIC
     FILE PHIN
0*
     FILE PROMT
0*
0*
     FILE SCISEARCH
     FILE TOXLINE
0*
    FILE TOXLIT
0*
```

FILE WPIDS

FILE DPCI

FILE WPINDEX FILE APIPAT

67 67

5

60

```
FIL
         UROPATFULL
7
         NPADOC
3
   FIL.
    FILE PATDPA
1
    FILE PATOSDE
1
   FILE PATOSEP
38
   FILE PATOSWO
23
    FILE PIRA
2
    FILE RAPRA
6
    FILE TULSA
3
   FILE TULSA2
3
QUE ("CHU H"/IN OR "CHU H C"/IN OR "CHU H D"/IN OR "CHU H
 SEA L1 AND STREPTOCOCCUS EQUI
O* FILE ADISALERTS
O* FILE ADISINSIGHT
0* FILE AGRICOLA
0* FILE AIDSLINE
O* FILE ANABSTR
0* FILE AQUASCI
0* FILE BIOBUSINESS
0* FILE BIOSIS
 O* FILE CANCERLIT
 O* FILE CEABA
 O* FILE CEN
 O* FILE CIN
 0* FILE CONFSCI
 O* FILE DDFU
0*
    FILE DRUGLAUNCH
 0* FILE DRUGMONOG2
 0* FILE DRUGNL
 0* FILE DRUGU
 O* FILE EMBAL
 O* FILE EMBASE
 O* FILE GENBANK
 O* FILE HEALSAFE
 0* FILE KOSMET
 O* FILE LIFESCI
 O* FILE MEDLINE
 O* FILE NIOSHTIC
 O* FILE NTIS
 O* FILE OCEAN
 O* FILE PHAR
 0* FILE PHIC
 O* FILE PHIN
 0* FILE PROMT
 O* FILE SCISEARCH
```

0* FILE TOXLIT QUE L1 AND STREPTOCOCCUS EQUI L2

O* FILE TOXLINE

L1

- => s attenuatedstreptococcus equi
 <-----User Break---->
 u
 => s attenuated streptococcus equi
 - 25 FILES SEARCHED...
 - 1 FILE IFIPAT
 - 40 FILES SEARCHED...
 - 1 FILE USPATFULL
 - 1 FILE EUROPATFULL
 - 53 FILES SEARCHED...
 - 3 FILES HAVE ONE OR MORE ANSWERS, 65 FILES SEARCHED IN STNINDEX
- L1 QUE ATTENUATED STREPTOCOCCUS EQUI

(FILE 'HOME' ENTERED AT 15:49:38 ON 23 NOV 1998)

INDEX 'ADISALERTS, ADISINSIGHT, AGRICOLA, AIDSLINE, ANABSTR, AQUASCI, BIOBUSINESS, BIOSIS, BIOTECHABS, BIOTECHDS, CABA, CANCERLIT, CAPLUS, CEABA, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, EMBAL, ...' ENTERED AT 15:49:52 ON 23 NOV 1998

SEA STREPTOCOCCUS EQUI

116 FILE AGRICOLA

SEA ATTENUATEDSTREPTOCOCCUS EQUI

SEA ATTENUATED STREPTOCOCCUS EQUI

- 1 FILE IFIPAT
- 1 FILE USPATFULL
- 1 FILE EUROPATFULL

OUE ATTENUATED STREPTOCOCCUS EQUI

SEA STREPTOCOCCUS EQUI

116 FILE AGRICOLA

- 1 FILE AIDSLINE
- 1 FILE AQUASCI
- 12 FILE BIOBUSINESS
- 184 FILE BIOSIS
- 56 FILE BIOTECHABS
- 56 FILE BIOTECHDS
- 276 FILE CABA
 - 2 FILE CANCERLIT
- 110 FILE CAPLUS
 - 4 FILE CEABA
 - 1 FILE CIN
 - 3 FILE CONFSCI
 - 10 FILE DGENE
 - 1 FILE DRUGU
 - 90 FILE EMBASE
 - 36 FILE GENBANK
- 18 FILE IFIPAT
- 18 FILE JICST-EPLUS
- 71 FILE LIFESCI
- 133 FILE MEDLINE
 - 1 FILE PHAR
- 14 FILE PHIN
- 1 FILE PROMT
- 100 FILE SCISEARCH
- 10 FILE TOXLINE
- 17 FILE TOXLIT
- 54 FILE USPATFULL
- 36 FILE WPIDS
- 36 FILE WPINDEX
- 14 FILE DPCI
- 8 FILE EUROPATFULL
- 49 FILE INPADOC
- 16 FILE JAPIO
 - FILE PATDPA

L1

L2

QUE STREPTOCOCCUS EQUI

FILE 'CABA, BIOSIS, MEDLINE, AGRICOLA, CAPLUS, SCISEARCH, EMBASE, LIFESCI, BIOTECHDS, USPATFULL, INPADOC, GENBANK, WPIDS, IFIPAT, JICST-EPLUS, TOXLIT, JAPIO, PHIN, DPCI, BIOBUSINESS, DGENE, TOXLINE, EUROPATFULL, PATOSEP, CEABA, PATDPA, CONFSCI, CANCERLIT, ...' ENTERED AT 15:54:43 ON 23 NOV 1998

1476 S STREPTOCOCCUS EQUI L3 828 DUP REM L3 (648 DUPLICATES REMOVED) L42 S L4(10A)ATTENUATED L50 S L5 AND ADJUVANT L6 0 S L5 AND SAPONIN L7128 S L4 AND VACCINE rs2 S 8L AND SAPONIN L9 2 S L8 AND SAPONIN L10

=> log y

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION

Pat. No, 4,944,942

The . . . methyl salicylate the preferred range is between 1 and 4 weight percent. Finally, the formulation may contain a recognized vaccine adjuvant such as aluminum hydroxide gel or those taught in U.S. Pat. No. 3,919,411, preferably at levels between about 5 and . . . for the former type and levels between about 5 and 20% being preferred for the latter type. An especially preferred adjuvant is based on the polyacrylic acid cross linked with polyallyl sucrose sold as Carbopol 934P combined with polyoxyethylene sorbitan mono-oleate. . .

> d his

```
(FILE 'USPAT' ENTERED AT 15:46:11 ON 23 NOV 1998)
                   54 S STREPTOCOCCUS EQU
L1
                    1 S L1 AND SAPONIN
L2
                   23 S L1 AND VACCINE
L3
                     O S ATTENUATED STREETS COU SEQUI
L4
                     1 S ATTENUATED STREETS COUS EQUI
L5
                     0 S L5 AND ADJUVAUL
L6
L7
                     0 S L5 AND INERFERON
                     1 S L5
L8
                     0 S L5 AND SAPONIN
1.9
=> s 18
             31405 ATTENUATED
               6273 STREPTOCOCCUS
               8108 EQUI
                   1 ATTENUATED STREPTOCOCCUS EQUI
L10
                          (ATTENUATED (W) STREET TOCOCCUS (W) EQUI)
=> d 1 kwic
                                                                                  L10: 1 of 1
                    4,788,059 [IMAGE WAT RLE]
US PAT NO:
SUMMARY:
BSUM(10)
It . . . invention to provide . . hod of immunizing equines against virulent strains of Streptococcus . by inoculating the equine with an attenuated Streptococcus equi com is
CLAIMS:
CLMS(1)
 I . . .
A vaccine effective in protection where against infection by virulent strains of Streptococcus equions an immunizing dosage of an attenuated Streptococcus equions and attenuated Streptococcus equions and articles rendered avirulent while retaining its antigenicity through prolonged culturing in the
```

presence of acriflavine hydrochlesia.

<---->

d his

L6

	(FILE	'USPA	T.	ENTE	RED	ΑT	16	5:19	: 3'	7 ON	1 23	NOV	1998
L1		0	s	STREP	TOC	occi	JS	EQU	I	AND	AVI	REULI	INT
L2		10	s	STREP	TOC	occt	JS	EQU	I	AND	AVI	RULEI	TP
L3		3	s	L2 AN	D AI	<i>J</i> UCO	ΛAN	1T					
L4		0	s	TREPT	oco	CCUS	S E	EQUI					
L5		54	s	STREP	TOC	occt	JS	EQU	I				

10 S L5 AND ADJUVANT

11/3/

```
ANSWER 14 OF 48 BIOTECHDS COPYRIGHT 1999 DERWENT INFORMATION LTD
AN
      1987-04225 BIOTECHDS
ΤI
      Vaccine for protection against Streptococcus
    equi;
         containing avirulent mutant obtained from parent strain by
         mutagenesis
      Cornell-Res. Found.
PA
PΙ
      WO 8700436 29 Jan 1987
      WO 1986-US1460 14 Jul 1986
ΑI
PRAI US 1985-754613 12 Jul 1985
DT
      Patent
      English
LA
os
      WPI: 1987-037174 [05]
AB
      A vaccine for protecting horses against Streptococcus
    equi (causing the disease strangles) comprises an
    avirulent strain of S. equi which stimulates
      an antibody response in the nasopharyngeal mucosa. The new strain is
made
      by mutation of a virulent strain and retains a protein providing an
      M-protein fragment of mol.wt. 41,000. This fragment stimulates
formation
      of IgG and IgA antibodies similar to those found in animals which have
      recovered from infection with virulent S. equi. The
    avirulent strain is non-encapsulated, and is especially S
      . equi 709-27 (ATCC 53186). The vaccine may be given
      intranasally or orally. 709-27 is developed from the highly virulent
      strain CF32 (ATCC 53185) by nitrosoguanidine mutagenesis followed by
      screening for loss of virulence and for ability to protect mice. The
    vaccine provides efficient protection without any side-effects in
```

Janous.

4748019

US6004802

- L3 ANSWER 16 OF 48 CABA COPYRIGHT 1999 CABI
- AN 86:39843 CABA
- DN 862276553
- TI The protective response of the horse to an avirulent strain of Streptococcus equi
- AU Timoney, J. F.; Galan, J. E.; Y. Kimura [EDITOR]; others [EDITOR]
- CS Coll. Vet. Med., Cornell Univ., Ithaca, NY 14853, USA.
- SO Recent advances in streptococci and streptococcal diseases, (1985) pp. 294-295. Proceedings of the IXth Lancefield International Symposium on Streptococci and Streptococcal Diseases, Japan, September 1984. 7 ref. Publisher: Reedbooks Ltd. Chertsey
- CY United Kingdom
- DT Conference Article
- LA English
- AB Avirulent strain 709-27 of S. equi, developed as a live vaccine for nasal immunization against strangles, led to the production of IgA and IgG antibodies in the nasal mucosa, directed against a protein of 41 000 molecular weight.

Serum

antibod

ANSWER 6 OF 48 BIOTECHDS COPYRIGHT 1999 DERWENT INFORMATION LTD L3 AN 1999-09279 BIOTECHDS ΤI A Streptococcus equi vaccine; live attenuated Streptococcus equi vaccine, produced from S. equi culture, used to vaccinate against strangles in horses Akzo-Nobel PA Arnheim, The Netherlands. LO JP 11100329 13 Apr 1999 PΙ JP 1998-210514 27 Jul 1998 ΑI EP 1997-202925 24 Sep 1997; EP 1997-202365 29 Jul 1997 PRAI DTPatent LA Japanese WPI: 1999-296484 [25] OS AB A live, attenuated Streptococcus equi bacterium, especially S. equi TW928 (CBS813.95), used for the production of an optionally lyophilized vaccine, is claimed. The vaccine is used to prevent S. equi infection, following systemic administration, particularly by i.m. or s.m., particularly lip s.m. administration. vaccine may optionally also include an adjuvant, an antigen, or another attenuated pathogen. The pathogen is preferably a Potomac fever agent, Rhodococcus equi, Clostridium tetani, Mycobacterium pseudomallei, Streptococcus zooepidemicus, vesicular stomatitis virus, Borna virus, horse influenza virus, African horse sickness virus, horse arteritis virus, equid herpes virus 1-4, infectious anemia virus, horse encephalomyelitis virus, or Japanese type-B encephalitis virus. S. equi TW928 is attenuated by conventional techniques, and kept in a refrigerator, or a buffer containing glycerin at -70 deg. In an example, horse with no history of strangles were inoculated with the vaccine. Symptoms resulting from subsequent challenge with S. equi resulted in 98% decreased symptoms. (7pp)

Sold State of the State of the

```
L3
     ANSWER 3 OF 48 BIOSIS COPYRIGHT 1999 BIOSIS
AN
     1995:484962 BIOSIS
DN
     PREV199598499262
TΙ
     An assessment of mucosal immunisation in protection against
     Streptococcus equi ('Strangles') infections in horses.
     Wallace, Fiona J. (1); Emery, Julie D.; Cripps, Allan W.; Husband, Alan
ΑU
J.
CS
     (1) Dep. Pathol., Univ. Newcastle, Level 4, David Maddison Build., Royal
     Newcastle Hosp., Newcastle, N.S.W. 2300 Australia
SO
     Veterinary Immunology and Immunopathology, (1995) Vol. 48, No. 1-2, pp.
     139-154.
     ISSN: 0165-2427.
DT
    Article
LA
    English
     The ability of mucosally administered antigen to provide protection
AΒ
     against Streptococcus equi ('Strangles') infections in
     horses was examined. First, an enzyme linked immunosorbent assay (ELISA)
     was developed to detect the immune status of horses to S.
     equi. This assay was used to select Strangles-naive horses for the
     study and also to monitor their response to immunisation. Potential
     vaccine candidates were: (a) orally administered paraformaldehyde
     killed S. equi; (b) intraperitoneally (IP)
     administered paraformaldehyde killed S. equi in a
     non-inflammatory adjuvant; (c) orally administered live
     avirulent S. equi; (d) orally administered
    microencapsulated streptococcal M protein. The latter three preparations
     were first assessed in a rat model, using rate of lung bacterial
     following intratracheal inoculation of live virulent bacteria as
     an indication of efficacy. Candidates (a) and (b) were then assessed in
an
     equine model. IP immunisation of horses was shown to effectively induce
    after initial immunisation, horses were challenged intranasally with
     live virulent S. equi. Both groups of
```

equine model. IP immunisation of horses was shown to effectively induce production of specific antibody in mucosal and systemic sites. Four weeks after initial immunisation, horses were challenged intranasally with live virulent S. equi. Both groups of immunised horses demonstrated partial protection following vaccination. Of the IP immunised horses, only two out of four developed clinical signs of Strangles following live challenge. The orally immunised horses all developed submandibular abscesses containing S. equi. However, none of the immunised horses became as ill as the control horses in terms of fever, anorexia, loss of

- L3 ANSWER 25 OF 48 LIFESCI COPYRIGHT 1999 CSA 1999:66133 LIFESCI AN TIStreptococcus equi vaccine ΑU Hartford, O.A.; Foster, T.A.; Jacobs, A.R.H. CS Provost Fellows & Scholars of the College of the Univ. of the Holy SO (19990420) . US Patent 5895654; US CLASS: 424/237.1.. DT Patent FS W2 LA English SL English
- AB The present invention relates to a live attenuated strain of the bacterium Streptococcus equi, a pathogen causing strangles in horses. The invention also relates to a vaccine against strangles, methods for the preparation of such a vaccine and to the use of the strain for the preparation of such a v

```
ANSWER 24 OF 48 IFIPAT COPYRIGHT 1999 IFI
L3
AN
      2330060 IFIPAT; IFIUDB; IFICDB
ΤI
      PROTECTION OF EQUINES AGAINST STREPTOCOCCUS EQUI;
      BACTERIAL VACCINE; ADMINISTERING INTRANASALLY OR ORALLY TO
      Timoney, John F, Lansing, NY
      Timonev John F
IN
      Cornell Research Foundation, Inc, Ithaca, NY
PAF
      Cornell Research Foundation Inc (20656)
EXNAM Brown, Johnnie R
EXNAM Mohamed, Abdel A
      Barnard, Ralph R
ΑG
                         19930202
ΡI
      US 5183659
      US 1988-207320
                        19880615
ΑI
XPD
      2 Feb 2010
      US 1985-754613
                         19850712 CONTINUATION
                                                         ABANDONED
RLI
FI
      US 5183659
                        19930202
DT
      UTILITY
      CHEMICAL
FS
CLMN 10
      4 Drawing Sheet(s), 3 Figure(s).
GΙ
      A new bacterial vaccine to protect susceptible equine against
AΒ
    S. equi which causes strangles. The vaccine
      stimulates a nasopharyngeal immune response in a susceptible equine
      through the presence of antibody activity in the nasopharyngeal mucus.
      The vaccine is a S. equi strain which
      contains an M protein fragment of 41,000 mw and is adapted for
      administration to equine either intranasally or orally as a
    vaccine. There is described a new strain of S.
    equi (709-27), a method of making and isolating useful
    vaccine strain of S. equi bacteria which
      stimulates an antibody response in the nasopharyngeal mucosa of the
```

Die War nurvalund

L3 ANSWER 13 OF 48 BIOTECHDS COPYRIGHT 1999 DERWENT INFORMATION LTD AN1989-02559 BIOTECHDS ΤI Horse strangles vaccine; preparation by attenuating Streptococcus equi by culture in the presence of acriflavine hydrochloride PA Coopers-Anim. Health PΙ US 4788059 29 Nov 1988 ΑI US 1985-754909 15 Jul 1985 PRAI US 1985-754909 15 Jul 1985 DTPatent English LA OS WPI: 1988-360693 [50] AB A vaccine effective in protecting horses against infection by virulent strains of Streptococcus equi is new. S. equi is attenuated by prolonged (11 wk) culture in the presence of acriflavine hydrochloride. The culture medium may be Todd-Hewitt broth which preferably contains progressively increasing concentrations of acriflavine hydrochloride (2 ppm-16 ppm). Also new is a method of immunizing horses against virulent strains of S. equi which comprises inoculating the horses with attenuated S. equi, prepared using the new

5,183659

TOADOOD Je Chi

```
L3
     ANSWER 30 OF 48 TOXLIT
AN
     1987:44829 TOXLIT
DN
     CA-106-162558X
ΤI
     Vaccine for the protection of equines against
     streptococcus equi.
ΑU
     Timoney JF
     (1987). PCT Int. Appl. PATENT NO. 87 00436 01/29/87 (Cornell Research
SO
     Foundation, Inc.).
CY
     United States
\mathsf{DT}
     Patent
FS
     CA
LA
     English
OS
     CA 106:162558
EM
     198706
AB
     S. equi 709-27, An equine human strain which contains
     an M protein fragment of mol. wt. 41,000, is used in a live
     vaccine to protect equines from strangles caused by S.
     equi. S. equi CF32 was subjected to
     nitrosoguanidine mutagenesis and nonencapsulated colonies were screened
     for loss of virulence in mice, for protection of horses, and by
     immunoblotting for formation of the 41,000-dalton fragment of M protein.
     IgA and IgG antibodies in the nasopharyngeal mucus of vaccinated
```

ponies were directed mainly against this M protein fragment, whereas

an

serum